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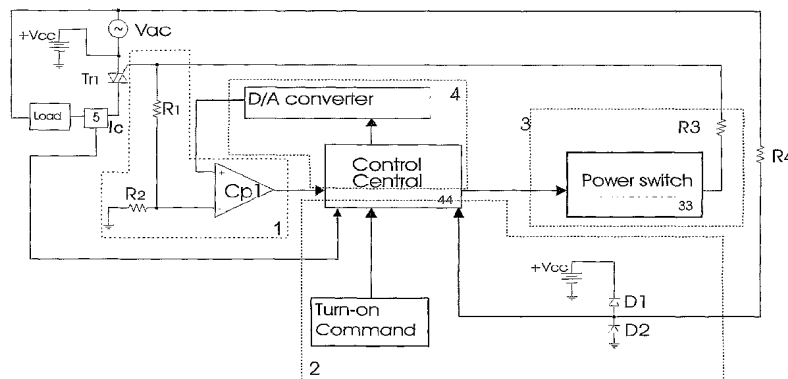
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(54) Title: A SYSTEM AND A METHOD OF CONTROLLING THE TRIGGERING OF A TRIAC



(57) Abstract: The present invention relates to a system of controlling and triggering a TRIAC as well as to a method of controlling the triggering of a TRIAC, by actuating a load with any power factor from a single short-duration pulse at the gate of the TRIAC. In order to make use of a single comparator (CP<sub>1</sub>) and also to operate without limitation at the current level (i<sub>c</sub>), a system of controlling and triggering a TRIAC (TR) is foreseen, the TRIAC comprising a gate (G), the TRIAC (TR) being connected to a load, the gate (G) being electrically connected to a control unit (4), which actuates the TRIAC (TR) for selectively applying a network voltage (V<sub>AC</sub>) to the load and enabling the circulation of an electric current (i<sub>c</sub>) in the load, the system comprising a gate voltage detection unit (1), a control unit (4), the gate voltage detection unit (1) being electrically connected to a control unit (4), the control unit (4) establishing a gate (G) voltage limit value (+limit, -limit) and generating a pulse at the gate (G) of the TRIAC (TR) to keep it in conduction, the pulse at the gate (G) being generated from a comparison between the voltage limit value (+limit, -limit) established by the control unit (4) and a voltage measured at the gate (G) from the gate voltage detection unit (1), the control unit (4) measuring the electric current (i<sub>c</sub>) and adjusting the voltage limit value (+limit, - limit) in a way proportional to the current (i<sub>c</sub>) value measured. A method is also provided for controlling the triggering of a TRIAC (TR) in order to actuate the system of the present invention.



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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*